

ASU Speech and Hearing Clinic – Vestibular Services

Thank you for considering the ASU Speech and Hearing Clinic for your balance concerns. Millions of Americans report dizziness and other balance problems to their family physicians each year. During those visits they describe a wide assortment of symptoms and the consequences of imbalance in their daily lives. It can be very difficult for anyone other than the person who is experiencing the problem to understand the nature and severity of the disorder. Often words like “light headed” can be used to describe any number of sensations. An essential component to understanding the patient’s specific problem is simply taking the time to define their individual symptoms and concerns. At ASU we take care that sufficient time is spent gathering information about your problem. We begin that process by having you fill out the “Dizziness Handicap Inventory” which was developed by Dr. G.P. Jacobson and Dr. C.W. Newman, 1990. A sample of this standardized questionnaire is given at the bottom of this page. We also look at your medical history and your lifestyle in this process.

We recognize the importance of the balance system in allowing us to be safe during the normal activities of our daily lives. Imbalance may be short lived and very minor or persistent and very intense. It can affect our ability to drive a vehicle, work, participate in exercise or sports activities, and inhibit our independence in general. It is therefore important that the problem be investigated, even if it appears to be minor. This is especially true for seniors who are at higher risk for falls and hip and pelvis fractures.

Our patients are often surprised to learn that the source of their vertigo may be in their inner ears. At ASU the vestibular (balance) testing consists of a number of tests that help determine the status of the vestibular portion of the inner ear. When our balance is impaired we often have difficulty maintaining our orientation. The room may seem to spin or we may have a tendency to veer to the left or right when we walk. Symptoms might include the sensation of falling or visual blurring and some individuals might experience sweating, nausea or even vomiting.

The diagnosis of balance disorders is complicated. There are many medical conditions including ear infections, blood pressure changes, vision conditions and medications which can cause or contribute to imbalance.

ASU vestibular services include a comprehensive battery of tests that are designed to evaluate a patient’s balance system. Electronystagmography (ENG) and Videonystagmography (VNG) are used to record and analyze eye movements that help us determine how well the balance system is working. Recordings of those eye movements will be made with electrodes taped around the eyes or by infrared goggles.

The ENG test is used to determine whether the imbalance is due to an inner ear (vestibular) disorder. We use a computer and eye movement tracking goggles to carefully measure involuntary eye movements called “nystagmus.” To elicit the nystagmus, the patient’s balance system is stimulated in a number of different ways. The main components of testing include saccade, tracking, positional and caloric tests.

Saccade testing looks at rapid eye movements. The tracking test evaluates how well the eyes move to follow a visual target. The positional test measures dizziness associated with changes in head position. The caloric test measures responses to inner ear thermal changes as warm and cool water is introduced into the ear canal.

Treatment for vestibular disorders varies according to the diagnosis. Treatments may consist of drugs, diets, physical therapy, or in severe cases, surgery. In general there are four ways in which vestibular rehabilitation programs may be completed.

The Self-Directed approach is commonly used for patients who do not require supervision for their physical exercises. These exercises require that the patient spend 20-30 minutes per session with two or three sessions per day. Most patients report a reduction or elimination in symptoms within the first month.

When the symptoms are acute, a Vestibular Rehabilitation program may be initiated. This program requires supervision during the exercises and may require specialized equipment. Emphasis is placed on fall prevention. There is usually one or two 60 minute sessions per week for a total of about ten sessions. At the end of the program the patient is often enrolled in a self directed program.

For those patients with a diagnosis of Benign Paroxysmal Positional Vertigo (BPPV) there are Repositioning and Liberatory therapies. These maneuvers require one or two visits to reposition the otoconia in the semicircular canals.

In some mild cases, the symptoms may simply go away as the vestibular apparatus heals or as the nervous system learns to compensate for the disorder. Sometimes, symptoms can be controlled but not eliminated entirely.

Once your evaluation is completed, the results will be carefully reviewed. This is an important but time consuming part of the process. It will therefore not be possible to provide you with your test results at the time of your evaluation. After your test data has been analyzed, a complete and detailed report will be forwarded to you and/or your physician.

Dizziness Handicap Inventory (Dr. G. P. Jacobson, Dr. C.W. Newman)

(Questions are answered with *yes, sometimes* or *no*)

1. Does looking up increase your problem?
2. Because of your problem, do you feel frustrated?
3. Because of your problem, do you restrict your travel for business or recreation?
4. Does walking down the aisle of a supermarket increase your problem?
5. Because of your problem, do you have difficulty getting into or out of bed?
6. Does your problem significantly restrict your participation in social activities such as going out to dinner, going to movies, dancing, or to parties?
7. Because of your problem, do you have difficulty reading?
8. Does performing more ambitious activities like sports, dancing, household chores such as sweeping or putting dishes away increase your problem?
9. Because of your problem, are you afraid to leave your home without having some one accompany you?
10. Because of your problem, have you been embarrassed in front of others?
11. Do quick movements of your head increase your problem?
12. Because of your problem, do you avoid heights?
13. Does turning over in bed increase your problem?
14. Because of your problem, is it difficult for you to do strenuous housework or yardwork?
15. Because of your problem, are you afraid people may think you are intoxicated?
16. Because of your problem, is it difficult for you to walk by yourself?
17. Does walking down a sidewalk increase your problem?
18. Because of your problem, is it difficult for you to concentrate?
19. Because of your problem, is it difficult for you to walk around your house in the dark?
20. Because of your problem, are you afraid to stay home alone?
21. Because of your problem, do you feel handicapped?
22. Has your problem placed stress on your relationships with members of your family or friends?
23. Because of your problem, are you depressed?
24. Does your problem interfere with your job or household responsibilities?
25. Does bending over increase your problem?